

Notice of Allowability

Application No.

10/762,305

Examiner

Edward F. Landrum

Applicant(s)

IDE ET AL.

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's remarks filed on 3/31/2006.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 5/3/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other See Continuation Sheet.

Continuation of Attachment(s) 9. Other: Examiner's Response to Applicant's Questions.

DETAILED ACTION

Election/Restrictions

1. Dependent claims 2, 4, and 6-8, directed to non-elected inventions have been rejoined to the case because independent claim 1 is allowable.

Allowable Subject Matter

2. Claims 1-8 are allowed.
3. Claim 1 is allowable for defining a manufacturing apparatus, for optical media, comprising a resin layer and a substrate layer, comprising a cut-forming machine, a punching machine, a transfer mechanism, and a controller. The cut-forming machine requiring a positioning protrusion, a circular blade with a diameter larger than the diameter of the hole in the center of the optical media for cutting only the resin layer of the optical media, and the positioning protrusion having a truncated conical shape designed to fit in the hole in the center of the optical media. The punching machine comprises a punching blade and a second positioning protrusion, the punching blade having a hollow cylindrical shape and a diameter slightly smaller than the diameter of the recess, the punching blade designed to punch a hole in the center of the optical media. The transfer mechanism has a disk shape with recesses to hold the disks, the recesses each having holes in the bottom to allow both the cut-forming and punching machines to come in contact with the bottom of the optical media. The transfer mechanism rotates about an axis to move the recesses into and out of each work station (the cut-forming and punching mechanisms). A controller controls the

movement of the transfer mechanism to align the transfer mechanism with the cut-forming and punching mechanisms.

Novak et al (U.S Patent No. 5,232,505) teaches a disk-shaped transfer mechanism to transfer optical media to a plurality of workstations, but fails to teach a hole in each recess for performing work on the underside of the work piece.

Westerman (U.S Patent No. 4,581,188) teaches a manufacturing apparatus for a disk-shaped substrate where the transfer mechanism (12) comprises a recess for the disk-shaped substrate. The recess further contains a hole. A molding operation occurs while the disk-shaped substrate is being held by the transfer mechanism. Westerman fails to teach a cut-forming or punching operations on a center hole while the disk is in the recess and further fails to teach a positioning protrusion being used while the molding operation occurs.

Layman (U.S Patent No. 3,728,062) teaches a blade for penetrating a work piece around the periphery of an article to be removed but fails to teach penetrating a single layer of an article containing multiple layers and also fails to teach using a positioning protrusion during the cutting operation.

Herbst et al (U.S Patent No. 3,970,023) scoring only one of two separate and distinct layers of a metal can for the purpose of preventing a fracture of the protective layer (3a) on the metal can. Herbst et al fails to teach a positioning protrusion used during the scoring operation and the operation being performed around a hole located in the center of the work piece.

Hiroshi et al (Japanese Publication No. 58-175630) teaches a punching blade punching from the bottom of a material but fails to teach a positioning protrusion.

Chambers et al (U.S Patent No. 4,379,686) teaches forming a center hole in disk-shaped media with a pin (128) but the diameter of the pin is defined as "slightly larger than the diameter of the hole" with a projection (129) that is the same size of the hole to be made (Col. 3, lines 28-47), and a positioning protrusion (133). Chambers et al fails to teach the punch being smaller than the diameter of a recess already found in the disk-shaped media because the center hole is made at the same time the media is being molded in the cavity and therefore never actually punched the disk-shaped media.

While Novak et al, Westerman, Layman, Herbst et al, Hiroshi et al, and Chambers et al are considered combinable it would be hindsight to provide the basic structure of a transfer mechanism from Novak and add the holes formed in the recesses of the transport disk of Westerman, as well as place a Cut-forming (scoring) apparatus, as shown in Layman and Herbst et al, and a punching operation, as shown in Hiroshi et al, while providing a positioning projection as found in Chambers, especially since neither the teachings of only Novak et al, Westerman, and Chambers are related to manufacturing disk-shaped media, while Layman and Hiroshi are related to cutting sheet material, and Herbst is related to the scoring and bending of metal cans.

4. Claims 2-8 are dependent upon claim 1 and are therefore allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Examiner's Response to Applicant's Questions

5. The drawings filed on January 23, 2004 are accepted as no replacement sheets are needed for the instant application to be considered allowable. The IDS filed on May 3rd, 2004 has been resubmitted to sign off on the documents previously missed.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EFL
5/9/2006


BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER